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fastned to a strong Thread, which going over the Pulley is stretched horizontally from G to the Nails F; to which it is fastned, so as to be about a quarter of an Inch above the Board.

B is one of the Bladders, hanging with the Neck or heaviest part downwards, by means of a Loop of fine Thread as E H, which goes over the Horizontal Thread G E F. Now when with a pair of Scissars the Thread of the Lead (which in all is but one Foot long) is cut just at E, before the Loop of the Bladder, the Lead pulling away the String the Loop of the Bladder slips off the remaining Thread F E, and begins to fall exactly in the same Instant as the Lead: But if the Thread should be cut between E and F, as the Lead falls its Thread might give the Bladder an oblique Direction.

He that observes the time either with a Pendulum or Chronometer may take it very exactly, by seeing the motion of the Scissars as they cut the Thread.

N. B. As the Diameters of the Bladders were taken by wrapping a Thread twice round them, and something must be allowed for the thickness of the Thread; I have here under set down the Diameters of the Bladders, as corrected by that Allowance. *Viz.* A 5,28 Inches; B 5,19; C 5,30; D $5\frac{1}{4}$; and E just 5 Inches in Diameter.

The Bladder E was rough, with several Wrinkles and inequalities, which made it be longer in falling than it ought to have been, according to its Diameter and Weight.

A Pail of Water thrown down met with such a Resistance in falling 272 Foot thro' the Air, that it was all turn'd into Drops like Rain.

F I N I S.

ERRATA. *Phil. Trans.* N°. 357. Page 848. l. 22. lege ab *b* 11' 32".
N°. 359. p. 932. l. 17. lege $t = 0'$, l. p. 937. l. 5, 6. lege restituitur.
Et Systole Arteriarum cum Cordis Diastole duratione convenit.
N°. 361. p. 1005, l. 16. read, *proof of the falsity of the Opinion.*